

Results of the QPR EMS Suicide Knowledge and Self-Efficacy Survey July 2010

INTRODUCTION

In 2007, Colorado had the sixth highest suicide rate in the United States, 16.7 suicides per 100,000 persons, which is considerably higher than the suicide rate for the United States as a whole (11.5 suicides per 100,000 persons).

During June 2010, Colorado EMS personnel were asked to take part in a voluntary survey to assess their knowledge related to suicide prevention, as well as their perceived self-efficacy to help someone who is experiencing a suicidal crisis. In order to ascertain knowledge gain and self-efficacy effects from the training program, voluntary participants in this evaluation were asked to complete the 17 survey items both before and after completing the online customized QPR training for EMS professionals.

METHODS

Participants

The respondents for this survey were 10 EMS personnel from the state of Colorado. The respondents chose to take part in the optional pre-training and post-training surveys as part of their engagement in the online QPR training for EMS professionals.

Survey

The pre-training and post-training survey consisted of 10 items asking the participant to rate their level of knowledge related to suicide on a five-point Likert scale (1=Very Low up to 5=Very High). The survey also included seven items assessing the participant's perceived efficacy related to intervening with suicidal persons on a five-point Likert scale (1=Disagree up to 5= Strongly Agree).

RESULTS

NOTE: The results of this evaluation are based upon only 10 participants who completed both the pre-training and post-training surveys. Since the number of participants is so low, no reliable results can be taken from this evaluation. The results presented here should be considered preliminary. Further analyses with a larger sample size are needed to confirm any findings presented in this paper.

Results of the pre- and post-training surveys were examined utilizing repeated measures t-tests, where the mean scores for each item for the 10 participants were analyzed comparing the pre-training mean score to the post-training mean score to assess whether there is a statistically significant increase in scores after the participants completed the QPR training.

Analysis of the 10 suicide knowledge survey items found that all 10 items exhibited a statistically significant ($p < .05$) increase from pre-training to post-training. Based upon the results of the 10 respondents who voluntarily completed the optional pre-training and post-training suicide knowledge and self-efficacy surveys, mean scores, mean score difference between pre and post-training, percentage change, t-score, and statistical significance level (p) can be found in Table 1 below.

Table 1: Pre-Training vs. Post-Training Suicide Knowledge Mean Scores

Survey Item	Pre-Training Mean	Post-Training Mean	Mean Difference	Percentage Change	t-score	p
1. Facts concerning suicide risk detection assessment and management of suicidal persons	2.20	3.70	1.50	68%	-5.58	.000
2. Warning signs of high risk for a suicide attempt?	2.70	3.80	1.10	41%	-4.71	.001
3. How to ask a distressed person about current suicidal ideation	2.50	4.20	1.70	68%	-5.67	.000
4. Persuading a suicidal person to accept treatment or a referral for further evaluation or treatment by another provider	2.50	3.90	1.40	56%	-4.58	.001
5. How to set up a plan that will minimize suicide risk ("safety plan")	1.60	3.20	1.60	100%	-7.24	.000
6. Information about how to use myself and others to help reduce suicide risk	1.70	3.50	1.80	106%	-7.22	.000
7. Rate how you feel about the appropriateness of asking a person about suicide who isn't reporting any suicidal thoughts but you have concerns about them being suicidal	2.60	4.10	1.50	58%	-4.39	.002
8. What is the likelihood you will ask someone about the presence of suicidal thoughts?	3.00	4.10	1.10	37%	-3.50	.007
9. Please rate your level of understanding about suicide and suicide prevention	2.70	3.80	1.10	41%	-6.13	.000
10. Please rate your level of understanding about suicide risk detection and the management of suicidal persons	2.20	3.80	1.60	72%	-7.24	.000

Note: n=10 respondents

Note: All 10 items were scored on a 1-5 Likert scale, where 1=Very Low, 2=Low, 3=Medium, 4=High, and 5=Very High.

As previously mentioned, participants were also asked to answer seven self-efficacy items related to their self-perceptions about intervening with a suicidal individual. Statistically significant differences were found between from the pre-training survey to the post-training survey on three of the seven items (Self-Efficacy Items 1, 4, and 7). See Table 2.

Table 2: Pre-Training vs. Post-Training Suicide Self-Efficacy Item Mean Scores

Survey Item	Pre-Training Mean	Post-Training Mean	Mean Difference	Percentage Change	t-score	<i>p</i>
1. If a suicidal person was showing signs of suicide I would directly raise the question of suicide with them.	3.80	4.40	0.60	16%	-2.71	.024
2. If a person's words and/or behavior suggest the possibility of suicide I would ask the person directly if he/she is thinking about suicide.	3.80	4.40	0.60	16%	-1.96	.081
3. If a suicidal person told me they were thinking about suicide I would ask more questions and attempt to mobilize resources for the person	3.90	4.40	0.50	13%	-1.86	.096
4. I feel confident in my ability to talk to someone about suicide and help them access suicide prevention resources	3.10	4.20	1.10	35%	-6.13	.000
5. I don't think I can prevent someone from suicide	2.10	1.70	-0.40	-20%	1.31	.223
6. I don't feel competent to ask someone about suicide	2.20	1.60	-0.60	-27%	1.62	.140
7. I feel competent in my ability to help a suicidal person access appropriate suicide prevention resources	2.50	4.10	1.60	64%	-6.00	.000

Note: All 7 items were scored on a 1-5 Likert scale, where 1=Disagree, 2=Moderately Disagree, 3=Neutral, 4=Agree, and 5=Strongly Agree.

DISCUSSION

The purpose of this evaluation was to determine the impact of a customized online QPR training for EMS participants and their self-evaluated suicide knowledge and perceived efficacy in intervening with a suicidal individual. Unfortunately, as noted above, only 10 participants completed both the pre-training and post-training surveys. Thus, the results of this evaluation should be considered only as preliminary, with further analyses with a larger sample size needed to confirm any of these findings.

Overall, these initial findings with EMS personnel are promising, as all 10 perceived knowledge items exhibited a statistically significant increase from the pre-training survey to when the participants completed the post-training survey. Additionally, three of the seven self-efficacy items exhibited significant increases from the pre-training to the post-training survey. Thus, these preliminary findings are indicative of a positive increase in perceived knowledge and

self-efficacy in participants who complete the QPR-EMS online training. Utilizing a larger sample size of EMS professionals, as well as a research design that includes a control group to control for any effects that may have occurred over the course of the study, are recommended.

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